

Solutions for GeoWorkSheet No. 87

Solutions sheet No. 87				Tangent Ratio - Find an Angle (degrees & minutes)				
Working								
No.	Opp	Adj	Hyp	Angle	Equation	Calculator	Nearest Minute	Solution
1	7	12		a	$a = \tan^{-1}(7/12)$	30.256437	30°15'	$a^\circ = 30^\circ 15'$
2	20	25		b	$b = \tan^{-1}(20/25)$	38.659808	38°40'	$b^\circ = 38^\circ 40'$
3	30	40		c	$c = \tan^{-1}(30/40)$	36.869898	36°52'	$c^\circ = 36^\circ 52'$
4	70	80		d	$d = \tan^{-1}(70/80)$	41.185925	41°11'	$d^\circ = 41^\circ 11'$
5	50	75		e	$e = \tan^{-1}(50/75)$	33.690068	33°41'	$e^\circ = 33^\circ 41'$
6	60	125		f	$f = \tan^{-1}(60/125)$	25.641006	25°38'	$f^\circ = 25^\circ 38'$
7	110	65		g	$g = \tan^{-1}(110/65)$	59.420773	59°25'	$g^\circ = 59^\circ 25'$
8	70	85		h	$h = \tan^{-1}(70/85)$	39.47246	39°28'	$h^\circ = 39^\circ 28'$
9	18	10		i	$i = \tan^{-1}(18/10)$	60.945396	60°57'	$i^\circ = 60^\circ 57'$
10	7	11		j	$j = \tan^{-1}(7/11)$	32.471192	32°28'	$j^\circ = 32^\circ 28'$
11	80	135		k	$k = \tan^{-1}(80/135)$	30.650668	30°39'	$k^\circ = 30^\circ 39'$
12	160	220		l	$l = \tan^{-1}(160/220)$	36.027373	36°2'	$l^\circ = 36^\circ 2'$
13	20	17		m	$m = \tan^{-1}(20/17)$	49.635463	49°38'	$m^\circ = 49^\circ 38'$
14	2.6	3.7		n	$n = \tan^{-1}(2.6/3.7)$	35.095817	35°6'	$n^\circ = 35^\circ 6'$
15	5.7	4.8		p	$p = \tan^{-1}(5.7/4.8)$	49.899092	49°54'	$p^\circ = 49^\circ 54'$
16	5	3.3		q	$q = \tan^{-1}(5/3.3)$	56.575189	56°35'	$q^\circ = 56^\circ 35'$
17	9.1	14.3		r	$r = \tan^{-1}(9.1/14.3)$	32.471192	32°28'	$r^\circ = 32^\circ 28'$
18	7.2	5.8		s	$s = \tan^{-1}(7.2/5.8)$	51.146626	51°9'	$s^\circ = 51^\circ 9'$
19	1.25	0.85		t	$t = \tan^{-1}(1.25/0.85)$	55.784298	55°47'	$t^\circ = 55^\circ 47'$
20	1.94	2.81		u	$u = \tan^{-1}(1.94/2.81)$	34.620868	34°37'	$u^\circ = 34^\circ 37'$